REMARKS/ARGUMENTS

This application has been carefully considered in light of the new grounds(s) of rejection in Examiner's Final Office Action dated October 6, 2006. Reconsideration and allowance are respectfully requested in view of the following.

Summary of Rejections

Claims 1, 2, 4-20 and 29 were pending at the time of the Office Action.

Claims 1, 2, 4, 6-8 and 29 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,974,237 to *Shurmer et al.*

Claims 5, 12-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Shurmer et al.*

Claims 9-11 and 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Shurmer et al.* in view of U.S. Patent No. 6,757,255 to *Aoki et al.*

Summary of the Response

Claims 1 and 10 are amended.

Claims 7-9 are canceled.

Summary of Claims Pending

Claims 1-2, 4-6, 10-20 and 29 are currently pending in this application.

Applicants hereby request further examination and reconsideration of the presently claimed application.

35 USC § 102 Rejections

Pending claims 1, 2, 4, 6, and 29 stand rejected under 35 USC § 102(b) as being anticipated by *Shurmer, et al.,* (U.S. Patent 5,974,237).

Response to Rejections under Section 102(b)

Applicants respectfully submit that the pending claims 1, 2, 4, 6, and 29 are not anticipated by the prior art of record.

Prima facie standard

Independent claim 1 and the pending dependent claims 2, 4, 6 and 29 stand rejected under 35 USC § 102(b) as being anticipated by *Shurmer, et al.,* (U.S. Patent 5,974,237). According to MPEP § 2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." The Applicant submits that *Shurmer, et al.,* fails to teach each and every element as set forth in independent claim 1, and consequently fails to anticipate claim 1.

Applicants' claim 1 has been amended to include the applet recited in the original claim 9. Claim 1 now describes a service node incorporating a bandwidth measurement device with a resident measurement application and client side applet configured for independently determining upload or download data transfer rates between a client and a network gateway and distinguishing those rates between the client and the gateway from those between the client and the network.

Applicants note with appreciation Examiner's statement at page 4 of the Final Office Action that *Shurmer, et al.* "do not explicitly disclose an applet on the client...". Accordingly, amended claim 1, which does include such an applet, is not anticipated by *Shurmer, et al.*

Rejected claims 2, 4, 6 and 29 all depend on claim 1 and include all of claim 1's elements. Accordingly, pending claims 1, 2, 4, 6 and 29 are not anticipated by *Shurmer, et al.* under 35 U.S.C 102(b).

35 U.S.C. § 103(a) Rejections

Pending claims 5 and 12-17 stand rejected under 35 USC § 103(a) as being unpatentable over *Shurmer, et al.,* (U.S. Patent 5,974,237) as applied above. Pending claims 10, 11 and 18-20 stand rejected under 35 USC § 103(a) as being unpatentable over *Shurmer, et al.* (U. S. Patent 5,974,237) in view of *Aoki, et al.* (U.S. Patent 6,747,255). Claim 1 and dependent claims 2, 4, 6, and 29 are not anticipated by *Shurmer, et al.* as set forth above, and they are also not obvious in view of the prior art of record as set forth below.

Response to Rejections under Section 103(a)

Amended claim 1 and previously presented claim 12 are the independent claims remaining in the case. Claims 3, 7-9 and 21-28 have been canceled. Claims 2, 4-6, 10, 11, 13-20 and 29 are all dependant, in whole or part on claims 1 or 12. Accordingly, all of the pending claims are allowable if claims 1 and 12 are allowable over *Shurmer, et al.* or *Shurmer, et al.* in view of *Aoki, et al.* under 35 U.S.C 103(a). In summary, Applicants respectfully submit that the pending claims 1, 2, 4-6, 10-20 and 29 are patentable over the prior art of record, whether based on *Shurmer, et al.* alone, or in combination with *Aoki, et al.*

According to MPEP § 2142, three basic criteria must be met to establish a *prima facie* case of obviousness:

> First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

Similarly, the fact that the Examiner has the burden of proof with respect to the elements of the *prima facie* case of obviousness is also well defined in MPEP § 2142:

> The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

Applicants respectfully submit that the cited references do not establish a *prima facie* case of obviousness as to the pending claims because the cited references fail to teach or suggest all of the claim limitations.

Shurmer, et al., discloses a real-time network node monitoring system. *Shurmer, et al.,* is configured to monitor multiple network nodes and other network equipment to determine service issues with specific pieces of equipment or equipment links. See *Shurmer, et al.* abstract; Col 1 lines 47-52; Col 4, lines 59-63; and Figures 1 and 4. *Aoki et al.* discloses a communication performance monitoring system that determines the "round trip time and a maximum segment size". *Aoki et al.* avoids "transmitting the multiplicity of measurement-oriented packets to the network." See, inter alia, *Aoki et al.* abstract, column 2; lines 4-7. The *Aoki et al.* "round trip" bandwidth, among other things, is "estimated" [Column 2; lines 8-10] on a "sliding window" basis [Figure 5] as a gauge of network congestion. *Aoki et al.* is adapted to facilitate real time load balancing operations in which server to client paths may be adjusted to avoid network congestion. *Aoki et al.* Column 10; lines 44-57.

Conversely, Applicants facilitate an on-demand measurement of the network data rate provided to a network client, for example the PC of an ISP customer, by passing data packets on demand between the network service node and the client. Applicants use transmitted data packets

to measure the actual upload or download bandwidth between the client and the network service node and to distinguish the actual upload or download bandwidth between the client and the gateway from the upload or download bandwidth between the client and the network.

Shurmer, et al. and *Aoki et al.* are both network performance monitoring systems used to diagnose or adjust for network equipment problems. Neither of them teach or suggest, alone or in combination, Applicants' client side bandwidth measuring system.

As noted above, *Shurmer, et al.* does not teach or suggest a client side applet used to transmit or receive data packets as described in Applicants' claim 1.

Shurmer, et al. also does not directly monitor data traffic between a specific network clients and a network gateway as claimed by Applicants in both independent claims 1 and 12, nor do they distinguish the bandwidth between a client and a network gateway from the bandwidth between the client and the network as a whole as also claimed in Applicants' claims 1 and 12. In *Shurmer, et al.*, data traffic with individual clients is measured, if at all, through the network as a whole. See Column 5; lines 8-10. *Shurmer et al.'s* "client stations" are merely the network operator's monitoring console. See Figure 1, elements 7 & 8 and Figure 4. *Shurmer, et al.* does not even teach or suggest a connection directly with an ultimate client of a network service, nor can it measure the bandwidth between a network gateway and such a client.

Aoki et al. does not overcome the insufficiency of *Shurner et al.*, nor does *Aoki et al.* teach or suggest any modification of *Shurner et al.* that would make it possible for *Shurner et al.* to perform the client side bandwidth upload or download tests taught by Applicants.

As noted above, *Aoki et al.* monitors the "round trip time" of data packets and not the upload or download speed of data packets as taught by Applicants in claims 1 and 12. *Aoki et al.* also teaches that one should **avoid** "transmitting special packets such as measurement-oriented

packets" across the network, ie to avoid "applying an overload on to a network" or by utilizing at most "a small number of measurement-oriented packets at a variable interval of a fixed time, viz., with no overload on the network." See, for example, column 2; lines 1-7 and 11-14.

Aoki et al. **teaches away from** Applicants' claims 1 and 12. Claims 1 and 12 measure the actual bandwidth, either upload or download, between a client and the network service node by transmitting data packets used to make the measurement. In other words, Applicants' data packets are used to measure the upload or download capacity of the network connection with the client. *Aoki et al.* **avoids** the use of such data packets in order to avoid overloading the network.

Aoki et al. also teaches away from Applicants' claims 1 and 12 by **estimating a "round trip time"** between network components. *Aoki et al.* is incapable of separately measuring, or even estimating, the upload or download bandwidth between a network service node and a client.

According to MPEP 2145.X.D.2, it is improper to combine references where the references teach away from their combination.

> It is well settled that "[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." MPEP § 2141.02 citing W.L. *Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984) (emphasis theirs).

This deficiency in *Aoki et al.* is not trivial. It is common for an ISP to rate an internet connection in terms of a separate download and upload bandwidth. The client of such an ISP would be unable to verify his connection specifications through the use of either *Shurner et al.* or *Aoki et al.*, whether alone or in combination.

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Because the cited references fail to teach all of the claim limitations of claims 1 and 24, the Office Action has failed to present a *prima facie* case of obviousness with respect to these claims. Therefore, claims 1 and 24 should be allowed.

Furthermore, dependent claims 2, 4-6, 10, 11, 13-20 and 29 depend directly or indirectly from allowable independent claims 1 and 12, as amended, and incorporate all of the limitations thereof. Accordingly, for the reasons established above, Applicants respectfully submit that claims 1, 2, 4-6, 10-20 and 29 are not obvious in view of the cited references and respectfully request allowance of these claims.
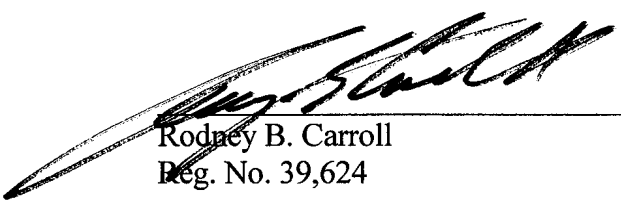
CONCLUSION

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections and objections is respectfully requested by Applicant. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Final Office Action dated October 6, 2006 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account No. 21-0765, Sprint. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore. In the event that the Examiner elects to maintain the rejection on the basis of the art of record, Applicants respectfully request that the proposed amendments be entered for purposes of appeal.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,

Date: 12-4-06

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